

REMARKS

The present Amendment is in response to the Office Action mailed June 24, 2004 in the above-identified application. Enclosed herewith is a Petition requesting a three-month extension of time for resetting the deadline for responding to the Office Action from September 24, 2004 to and including December 24, 2004.

As an initial matter, Applicants wish to thank Examiners Miller and Snow for conducting an interview of parent U.S. Patent Application Serial No. 10/382,702 on November 9, 2004.

In the Office Action, claim 12 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In response, claim 12 has been amended to depend from claim 11, as suggested by the Examiner. In view of the above noted amendment, claim 12 is now deemed to satisfy the requirements of 35 U.S.C. § 112, second paragraph, and is otherwise allowable.

The Examiner rejected claims 1-5, 16-18 and 20 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2004/0024462 to Ferree et al. Applicants respectfully assert that claim 1, as amended, is unanticipated by Ferree because the cited reference neither discloses nor suggests an apparatus including first and second members having opposing articulating surfaces with "the radius of curvature of each of the concave arcs of the first articulation surface being greater than the radius of curvature of the opposing convex arc of the second articulation surface and the radius of curvature of each of the concave arcs of the second articulation surface being greater than the radius of curvature of the opposing convex arc of the first articulation surface." Claims 2-5, 16-18 and 20 are unanticipated, *inter alia*, by virtue of their dependence from claim 1, which is unanticipated for the reasons set forth above.

The Examiner rejected claims 1-20 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,039,763 to Shelokov. Referring to FIGS. 1A-1C and 2A-2C thereof, Shelokov discloses an artificial disk including a first plate 1 and a

second plate 10. Referring to FIGS. 1A-1C, the first plate 1 has a substantially flat superior surface 2 and an opposing articulating inferior surface 3 having two laterally juxtaposed convex portions 4, 5. Referring to FIGS. 2A-2C, the second plate 10 includes a substantially flat inferior surface 11 and an articulating superior surface 12 having two laterally juxtaposed concave portions 13, 14. Referring to FIGS. 3A-3B, as the upper and lower plates 21-22 articulate along their articulating surfaces 25-26, the first plate 21 will move in the direction indicated by the arrow B from the home position depicted in FIG. 3A to a second position depicted in FIG. 3B. In the home position, the plates 21, 22, share a common center of rotation (23a,b). However, when the plate 21 is articulated to a second position as depicted in FIG. 3B, the instant centers of rotation 23a, 23b are no longer coincident. Therefore, when a patient using the present device bends in a forward or backward manner, the instant centers of rotation 23a, 23b will be displaced away from each other in an anterior-posterior fashion, i.e., there will be an anterior-posterior translation of the instant centers of rotation 23b with respect to the instant center of rotation 23a.

FIGS. 4A and 4B of Shelokov depict partial cross-sectional rear, or posterior, elevation views of an artificial spinal disc 30 having a first superior plate 31 and a second inferior plate 32. The first superior plate 31 has a bicondylar articulating surface that articulates with a bimodal concave articulating surface 34 of the second plate 32. The plates 31, 32 are depicted in a home or neutral position. However, when the first plate 31 is translated laterally along the arrow T with respect to the second plate 32, the first plate 31 will tilt slightly with respect to the second plate 32 and the instant centers of rotation 35a, 35b will be displaced from one another. Thus, the Shelokov artificial spinal disc provides first and second articulating surfaces that are adapted to provide a changing center of rotation when the articulating surfaces are translated or articulated with respect to one another in a lateral-to-lateral fashion.

In response to the rejection under Shelokov, Applicants respectfully assert that claim 1 of the present application is unanticipated because the cited reference neither discloses nor suggests a spinal implant including first and second members having opposing articulating surfaces, "wherein the first member has a first center of rotation that remains below the articulation surfaces during flexion/extension in the anterior-posterior plane of the spinal column and a second center of rotation that remains above the articulation surfaces during lateral bending in the lateral plane of the spinal column." Claims 2-20 are unanticipated, *inter alia*, by virtue of their dependence from claim 1, which is unanticipated for the reasons set forth above.

Applicants have amended the claims in the present application in order to obtain prompt allowance of the case. Applicants respectfully note that they intend to pursue claims in related or continuing applications that are of a broader scope than the claims currently pending in this application.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that she telephone applicant's attorney at (908) 654-5000 in order to overcome any additional objections which she might have.

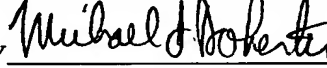
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If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: December 20, 2004

Respectfully submitted,

By 

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